- 51. (original) A method of producing an anodic foil for use in a capacitor, comprising the steps of:
- (a) anodizing the foil to produce a nano-porous amorphous oxide layer; and
- (b) hydrating the foil to convert said nano-porous amorphous oxide layer to a crystalline precursor layer.

## Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-51 are pending in the application, with claims 1, 44, and 51 being the independent claims. Claims 1 and 2 are sought to be amended herein. Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Applicants thank Examiner Ha for the courtesies extended during the telephone interview with Applicants' representatives on July 12, 2006. Examiner Ha requested that Applicants formally present their arguments in a Reply. As such, Applicants present the following remarks. Additionally, in response to the Examiner's comments, Applicants have amended claim 1 herein to incorporate allowable subject matter from originally filed dependent claim 2. Claim 2 has, in turn, also been amended. Applicants believe that these amendments place the present application in condition for allowance and, as such, should be permitted after the final rejection.

## Rejections under 35 U.S.C. § 103

The Examiner has rejected claims 1, 8-9 and 17-43 under 35 U.S.C. § 103(a) as being unpatentable over Hemphill *et al.* (U.S. Patent No. 6,197,184) in view of Melody *et al.* (U.S. Patent No. 6,409,905) (June 8, 2006 Office Action, page 3). Applicants respectfully traverse this rejection.

The Examiner argues that "it would have been obvious to one having ordinary skill in the art at the time the invention was made to use step of anodizing the foil of Melody et al. in Hemphill et al., in order to increase the surface area and increase the capacitance for the anodic foil" (June 8, 2006 Office Action, page 3). Applicants respectfully disagree. Melody et al. fails to remedy the deficiencies of Hemphill et al.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art at the time of Applicants' invention, to modify the reference or to combine reference teachings. MPEP § 2143. Applicants respectfully submit that the Examiner has not established a motivation to combine Hemphill *et al.* and Melody *et al.* to arrive at the claimed invention.

The Examiner admits that Hemphill *et al.* does not teach or suggest the step of anodizing a foil as claimed in the present invention (June 8, 2006 Office Action, page 3)("Hemphill et al. lack the step of anodizing the foil"). Additionally, Applicants have amended claim 1 herein to further clarify that the anodizing step recited in independent claim 1 includes "dipping the foil in an anodizing composition and applying a current." There is no disclosure in Hemphill *et al.* that suggests anodizing the foil, by dipping the foil in an anodizing composition and applying a current, prior to hydrating the foil, as

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required by independent claim 1, as amended. Further, none of the cited references would have provided motivation or suggestion to one of ordinary skill in the art to modify the invention disclosed in Hemphill *et al.* to provide a step of anodizing, by dipping the foil in an anodizing composition and applying a current, prior to the hydration step disclosed in Hemphill *et al.* For at least this reason, independent claim 1, as amended, claims 8-9 and 17-43 which depend therefrom, are patentable and allowance thereof is respectfully requested.

Melody et al. fails to remedy the deficiencies of Hemphill et al. Melody et al. discloses a process of anodizing a foil in an electrolyte solution containing glycerine, one or more orthophosphate salts, and a variable amount of water to produce anodic oxide with high hydration resistance (col. 6, lines 29-48). The focus on high hydration resistance in Melody et al. teaches away from the use of the anodizing step disclosed therein prior to the hydration step disclosed in Hemphill et al.

Applicants' previously amended claim 1 to recite that the step of anodizing the foil is performed *prior to* the step of hydrating the foil. Melody *et al.* teaches away from this feature of claim 1. Melody *et al.* discloses that the anodizing step forms anodic oxide with *high hydration resistance* on the anodic foil (col. 6, lines 44-45). Because the anodic oxide resulting from the anodizing step in Melody *et al.* is resistant to hydration, one of ordinary skill in the art, in view of Melody *et al.*, would have been discouraged from hydrating the foil *after* the anodizing step disclosed therein. Thus, one of ordinary skill in the art would not have been motivated to combine the hydration step of Hemphill *et al.* and the anodizing step of Melody *et al.* to arrive at the claimed invention. Given the emphasis on *high hydration resistance* in Melody *et al.*, one of ordinary skill in the

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art would not have been motivated to modify the invention of Hemphill *et al.* to include the anodizing step of Melody *et al.* prior to the hydration step disclosed in Hemphill *et al.* For at least this reason, Applicants respectfully submit that claims 1, 8-9 and 17-43 are patentable and respectfully request that the rejection of these claims be withdrawn.

## Allowable Subject Matter

The Examiner has indicated that claims 2-7 and 10-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form (June 8, 2006 Office Action, page 6). Claims 2-7 and 10-16 depend either directly or indirectly from and add further limitations to claim 1. For at least the reasons stated above with respect to independent claim 1, as amended, Applicants respectfully submit that claims 2-7 and 10-16 should be in condition for allowance without further amendment.

Claims 44-51 have been allowed.

## Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will

expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

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Date: <u>August 8, 2006</u>

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